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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,302	12/30/2003	Chih-Ping Hsu	030221	1672

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QUALCOMM INCORPORATED
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EXAMINER

GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/750,302

Applicant(s)

HSU ET AL.

Examiner

Tilahun B. Gesesse

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-25 is/are rejected.
- 7) ☒ Claim(s) 16-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/25/07 have been fully considered but they are not persuasive.

On page 10 second paragraph of response , applicant argued that Shiu does not disclose maintaining a signal quality (SIR) target for plurality of transport channels.

The examiner disagrees. Shiu teaches maintains a single reference target SNIR to the plurality of transport channels and the individual outer loop perform the necessary adjustment for those transport channels (see column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13).

On page 10 third paragraph of response , applicant argued that Shiu does not disclose adjusting the SIR target based on the status of the at least one data block received in the current update interval.

The examiner disagrees. Shiu teaches adjusting the SNIR target based on the status of the at least one data block received in the current update interval (see column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13).

On column 1, applicant's specification , defines that the received signal quality "SIR" may be quantified by a by a signal noise plus interference ratio or SNIR (see paragraph 0005).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-15, 18-25 rejected under 35 U.S.C. 102(e) as being anticipated by Shiu .
Claims 1, Shiu teaches a device in a wireless communication system (see fig. 1)
comprising:

Shiu teaches a data processor (522 of fig.5) operative to process at least one data block, (see fig.3) received in a current update interval and on at least one transport channel among a plurality of transport channels, and to provide a status of each of the at least one data block (col.8, line 59 through col.9 line 37).

Shiu teaches a controller (522 of fig.5) operative to adjust a single signal quality (SIR) target maintained for the plurality of transport channels based on status of the at least one data block received in the current update interval, (column 4, lines 7-62).
Shiu teaches the SIR target is adjusted by all data blocks received on all transport channels in the current update interval and is used for power control of data transmission on the plurality of transport channels, (see fig. 5 and col.9, lines 10-46 and col. 12, lines 52-62, column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13).

Claim 2, Shiu teaches the controller (522 of fig.5) is operative to increase the SIR target based on an up step if any one of the at least one data block is an erased data block and to decrease the SIR target based on a down step if all of the at least one data block are good data blocks (see figs. 6-8 and col.9, lines 10-46 and col.12, lines 52-62).

Claims 3-4. Shiu teaches each of the plurality of transport channels is associated with a respective down step size, and wherein the up step is a fixed value and the down step is set to a smallest down step size among down step sizes for transport channels with erased data blocks in the current update interval (see fig. 6-8 and col.9, lines 10-46 and col. 12, lines 52-62).

Claim 5, Shiu teaches all limitations as explained above in claim 1. it is a system claims, which correspond to system claim 1 above, therefore, it is analyzed and rejected for same reason as set forth in the claim.

Claim 6. Shiu teaches all limitations as explained above in claim 1. it is a system claims, which correspond to system claim 1 above, therefore, it is analyzed and rejected for same reason as set forth in the claim.

Claims 7-9, Shiu teaches each of the at least one transport channel is associated with a respective block error rate target, and wherein the controller is operative to increase or decrease the SIR target to meet or exceed the BLER target for each of the at least one transport channel (see figs.6-8 and col. 9, lines 10-46).

Claim 10, Shiu teaches the controller is operative to increase the SIR target by an up step having a fixed size and to decrease the SIR target by a down step having an

adjustable size (see figs. 6-8 and col.9, lines 10-46 and col. 12, lines 52-62).

Claim 11, Shiu teaches each of the plurality of transport channels is associated with a respective down step size selectable as the down step used to decrease the SIR target (see figures 6-8 and col. 9, lines 10-46).

Claim 12. Shiu teaches the controller is further operative to set the down step to a smallest down step size among down step sizes for transport channels with erased data blocks in the current update interval (see figure 5 and col.9, lines 10-46).

Claim 13, Shiu teaches the down step size for each of the plurality of transport channels is determined based on a block error rate (BLER) target and at least one transport format selected for the transport channel (see figure 5).

Claim 14. Shiu teaches the controller is further operative to saturate the SIR target to be within a predetermined range of values (column 4, lines 7-62).

Claims 15, Shiu teaches set to a second value otherwise, the first value being larger than the second value and the up step is set to a first value if an erased block is received for a transport channel without an erased block in a prior update interval and set to a second value otherwise, the first value being larger than the second value (see fig. 11).

Claim 18. Shiu teaches a transmit power control (TPC) processor operative to compare a received SIR for the data transmission against the SIR target and provide TPC commands used to adjust transmit power for the data transmission (see figs.5).

Claim 19, Shiu teaches the wireless communication system is a Code Division

Multiple Access (CDMA) system (column 1, line 23-31).

Claim 20, Shiu teaches an apparatus in a wireless communication system (see figures 3A and 3), comprising:

Shiu teaches means for processing (fig. 5, 522) at least one data block received in a current update interval and on at least one transport channel among a plurality of transport channels (see column 9, lines 10-46).

Shiu teaches means for determining a status of each of the at least one data block received in the current update interval as a good data block or an erased data block (column 4, lines 7-62).

Shiu teaches means for increasing a signal quality (SIR) target if any one of the at least one data block received in the current update interval is an erased data (col. 9, lines 10-46 and col. 12, lines 52-62).

Shiu teaches means for decreasing the SIR target if all of the at least one data block received in the current update interval are good data blocks, wherein the SIR target is used for power control of data transmission on the plurality of transport channels (see column 9, lines 10-46 and col. 12, lines 52-62).

Claim 21. Shiu teaches a processor readable media for storing instructions operable in a wireless device (column 9, lines 10-46).

Shiu teaches process at least one data block received in a current update interval and on at least one transport channel among a plurality of transport channels (column 9, lines 10-46).

Shiu teaches determine a status of each of the at least one data block received

in the current update interval as a good data block or an erased data block (see column 4, lines 7-62 and col. 12, 51-61) increase a signal quality (SIR) target if any one of the at least one data block received in the current update interval is an erased data block and decrease the SIR target if all of the at least one data block received in the current update interval are good data blocks, wherein the SIR target is used for power control of data transmission on the plurality of transport channels (see column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13).

Claims 22 and 25, Shiu teaches all limitations as explained above in claim 20. they are a method claims, which correspond to apparatus claim 20 above, therefore, it is analyzed and rejected for same reason as set forth in the claim.

Claims 23-24, Shiu teaches all limitations as explained above in claim 20. they are a system claims, which correspond to system claim 20 above, therefore, it is analyzed and rejected for same reason as set forth in the claim.

Allowable Subject Matter

Claims 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899.

The Central FAX Number is 571-273-8300. For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number .

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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TG

March 27, 2007


TILAHUN GESESSE
PRIMARY EXAMINEE